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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,778	09/25/2001	Jonathan Dwight Berry	5814-25	1763
7590	04/14/2004		EXAMINER	
McCormick, Paulding & Huber City Place II 185 Asylum Street Hartford, CT 06103-3402			COOLEY, CHARLES E	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 04/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/963,778	BERRY ET AL.
	Examiner Charles E. Cooley	Art Unit 1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 January 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 and 18-31 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-16 and 18-31 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-16 and 18-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Fleischli et al. (Pub. No. 2001/0038576 A1 with an earliest U.S. filing date of 03 MAY 2001).

The patent to Fleischli et al. discloses an apparatus for treating fluids having multiple partitions 20 (also note paragraph 0019 which teaches that such partitions can be disposed between each of the layers 1, 2) defining gaps A, B therebetween; a corrugated strip 1 or 2 in a respective gap; each strip 1 or 2 defining passages 14, 14' or 24, 24' having an orientation wherein the orientations are opposite to each other as seen in Figure 1; the recited tangential components imparted to the fluid being depicted at 40, 41 and being of different or opposite rotational directions (Fig. 2); the passages having the recited hydraulic diameter and length and angular orientation as seen in the Figures; the partitions being approximately concentric (Fig. 1); there being two or more gaps (paragraph 0028). The operational and functional language of the claims has

been considered but fails to impart or invoke any further structure or means (per 35 USC 112, sixth paragraph and MPEP 2181) to the pending apparatus claims which defines over the applied prior art. All recitations drawn to the swirl number are totally devoid of any structure to define over the prior art, as the swirl number itself is not considered an actual structural element. Anticipation under 35 U.S.C. 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys. Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Since every element of the claimed invention is disclosed by the applied prior art, the rejection under 35 U.S.C. 102(e) is considered proper.

Response to Amendment

3. Applicant's arguments filed 14 JAN 2004 have been fully considered but they are not persuasive.
4. The evidence entitled "CONTRACTOR'S PROGRESS REPORT" (PCI document) filed on 14 JAN 2004 presumably under 37 CFR 1.131 has been considered but is ineffective to overcome the Fleischli et al. reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Fleischli et al. reference to either a constructive reduction to practice or an actual reduction to practice. The evidence fails to clearly

explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. The vague and general statements in broad terms about what the evidence describes along with a general assertion that the evidence describes a reduction to practice (see the remarks on pages 13-14 of the response filed 14 JAN 2004) "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.").

The PCI document is not considered a proper affidavit or declaration under 37 CFR 1.131 sufficient to swear back of the Fleischli et al. reference. The PCI document is merely an exhibit not supported by an accompanying affidavit or declaration. Accordingly, the PCI document does not comply with 37 CFR 1.131(a)(b) because it is not in the form of a proper affidavit or declaration with the required showing of facts (see MPEP 715.07). The PCI document does not comply with the formal requirements set forth in MPEP 715.04. For example, the PCI document is silent with regard to inventor Jonathan D. Berry and fails to establish that investigator Kraemer is the same person as Gilbert O. Kraemer (listed as a joint inventor in the instant application). The PCI document is also not commensurate with the scope of the rejected claims. For example, the PCI document is silent with respect to much of the claimed subject matter

such as at least the claimed swirl numbers, the partitions defining gaps, the recited ratios, the directions of swirl, the number of gaps, and the recited orientation of the passages (see MPEP 715.02). Accordingly, the PCI document itself is deficient in many respects and is not accompanied by a proper affidavit or declaration under 37 CFR 1.131. The evidence filed 14 JAN 2004 is therefore wholly inadequate to overcome the Fleischli et al. reference. Further evidence filed subsequent to this final rejection will not be considered timely per MPEP 715.09.

With regard to Huber '620, the rejection made in the prior office action is withdrawn as this reference, upon reconsideration, is not considered to show the recited partitions between the corrugated strips.

Conclusion

5. The prior art made of record is considered pertinent since each of these cited patents issued more than a year prior to the U.S. filing date or alleged invention date of the instant invention: The patents to Halford et al. And Monroe show corrugated strips arranged in a generally concentric orientation. Huber et al. '688 shows partitions 8 between corrugated strips 6. Sicard et al. discloses multiple partitions 9 (see Fig. 3 and note the teachings of concentric partitions at col. 4, lines 3-7) or partitions 11 (Figure 5) defining gaps therebetween in which gaps are disposed corrugated strips 10 or 12 with each strip defining passages having an orientation wherein the orientations are opposite to each other as seen in Figures 3 and 5. Sperandio discloses multiple partitions 26, 27 defining gaps therebetween in which gaps are disposed corrugated strips 12 with each

strip defining passages having an orientation wherein the orientations are opposite to each other as seen in Figure 2 and at col. 1, lines 30-38; col. 2, lines 54-61; col. 3, lines 5-12 and lines 38-45.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles E. Cooley
Primary Examiner
Art Unit 1723

7 April 2004